



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/738,319	12/17/2003	Patrick M. Bailey	LENX-0002	7917

27964 7590 06/29/2006

HITT GAINES P.C.
P.O. BOX 832570
RICHARDSON, TX 75083

EXAMINER

NATALINI, JEFF WILLIAM

ART UNIT	PAPER NUMBER
----------	--------------

2858

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/738,319	Applicant(s) BAILEY ET AL.	
	Examiner Jeff Natalini	Art Unit 2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-26 is/are pending in the application.
- 4a) Of the above claim(s) 8-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/9/06 has been entered.

Drawings

2. The drawings are objected to because the drawing needs to more specifically point out what is claimed. The centralized connector module needs to be properly shown with interconnected terminal sets (these in particular need to be clearly illustrated) with components, so that the centralized connector module is configured to provide a common terminating point for said components during normal operation thereof. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

Art Unit: 2858

consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kanamori (6124716).

In regard to claim 1, Kanamori discloses a centralized connector module (the module includes in figure 1; test connector-20, wires-38, tester-26 and junction block-10 are considered as a whole the connector module as connector-18 is able to be connected to the block as a whole and thus can broadly be considered a connector module; col 2 line 66-col 3 line 8; the definition of a module¹ is defined as: "a self contained assembly of electronic components and circuitry installed as a unit", when the test connector is connected to the junction block, this will be an assembly of electronic

Art Unit: 2858

components-test connector, wires, tester, junction box- installed as a unit) comprising a dielectric body (col 3 line 32-39, the body of the testing unit is a dielectric) having interconnected terminal sets (fig 1-36) corresponding to components connectable thereacross (fig 1, electrical device- 24; states that multiple electrical devices can be tested simultaneously (col 1 line 67-col 2 line 3) and configured to provide a common terminating point for said components during normal operation thereof (see figure 2-pins 36 are connected to 30, which have a common terminating point adjacent the edge of PCB 12, col 3 line 26-34), said centralized connector module incapable of controlling said components (the device does not contain control means); and continuity indicator circuits associated with some of said terminals sets and configured to indicated continuity faults with respect to connected components (col 2 line 10-18 and abstract).

In regard to claim 7, Kanamori discloses wherein said terminal sets remain functional upon a failure of any of said continuity indicator circuits (col 1 line 64-col 2 line 18; abstract; also seen in figure 1 as the circuit test unit connects to the connection of the components on the board (12), but nothing is unplugged during testing so that the components would still operate).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

¹ Definition is taken from dictionary.com (sourced from The American Heritage Dictionary of the English Language, Fourth Edition.

Art Unit: 2858

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanamori (6124716) in view of Cheek et al. (3728616).

In regard to claims 2, 4, and 6, Kanamori lacks specifically stating that some of the terminal sets are connected in series and wherein the continuity circuits have impedances based on illuminating light emitting diodes, wherein voltage indicator circuits are associated with the output terminals sets to indicate an operation of corresponding ones of said components.

Cheek et al. discloses wherein the terminal sets are connected in series (fig 1 (R11 in series with R21 which is in series with R22, etc.) and wherein the continuity circuits have impedances based on illuminating light emitting diodes (col 3 line 35-41 and line 61- col 4 line 7), wherein voltage indicator circuits are associated with the output terminals sets to indicate an operation of corresponding ones of said components (abstract).

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Kanamori to include terminal sets connected in series where a light is illuminated in association with the detection, wherein voltage indicator circuits are associated with output terminals of the components as taught by Cheek et al. in order to test for wiring errors in a plurality of pairs of terminals (abstract) so that it can be determined which particular connections are defective or fine (col 3 line 61 – col 4 line 7).

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanamori (6124716) in view of Collier et al. (6323652).

Kanamori discloses a power supply (junction box (10)- col 3 line 9-16)).

Kanamori lacks specifically wherein an AC Power In terminal set is associated with a voltage indicator circuit and configured to indicate a presence of a voltage thereacross.

Collier et al. discloses wherein an AC Power In terminal set (provided by an outlet) associated with a voltage indicator circuit and configured to indicate a presence of a voltage thereacross (col 8 line 1-3).

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Kanamori to have an AC power in terminal set associated with a voltage indicator circuit as taught by Collier et al. in order to indicate that the level of the power supply is adequate (col 8 line 2-3).

Response to Arguments

7. Applicant's arguments filed 3/9/06 have been fully considered but they are not persuasive.

Applicant argues that Kanamori does not suggest each element of amended independent claim 1, stating that the continuity checking is performed by the tester not circuits within the wiring harness connector. The examiner must give the broadest reasonable definition to the claims, and thus the test circuit-26, test unit connector-20, and the junction block-10 considered as a whole can be a centralized connector module

as a harness-18 that is associated with one or more electrical devices (col 3 line 3-5) connects to this circuitry (or unit as a whole). The definition of a module (from dictionary.com) is defined as: "a self contained assembly of electronic components and circuitry installed as a unit", when the test connector is connected to the junction block, this will be an assembly of electronic components installed as a unit, in the system as claimed by Kanamori. Thus the continuity circuitry-26 would be included in the central connector module as broadly interpreted along with the test unit connector-40.

Applicant also argues that Kanamori lacks disclosing interconnected terminal sets corresponding to components connectable thereacross and configured to provide a common terminating point for said components during normal operation thereof, stating that the terminal pins 36 do not provide this. The examiner has reread the specification and looked over the drawings to try to ascertain exactly what applicant means by the claim language "to provide a common terminating point for said components". It seems by paragraph 22 in the specification and looking at figure 1 and 2, that the components are all connected to the centralized connector module and that is all that is meant by this claim. For example, a receiver connected to an entertainment center, may be connected to a stereo, DVD player, TV, and computer and all the audio/video connections would go into the receiver at a different point (thus they would all be connected to the receiver- but would not be connected "to a common terminating point", unless the receiver as a whole is considered a common termination point). It seems the centralized connector module as claimed in the present invention is connected to the components similar to how the receiver is in the above example, in that all the

components are connected to the module. Components that form “a common terminating point” as known in the art would mean that all the components are connected together at one point (node), possibly all grounded at one point. In this case, the wiring harness connector-18 that is associated with one or more electrical devices (col 3 line 3-5) connects to the centralized connector module (the module includes in figure 1; test connector-20, wires-38, tester-26 and junction block-10 considered as a whole), providing a common termination point of the centralized connector module.

Upon reviewing the reference and interpreting “a common terminating point” as known in the art, Kanamori discloses a dielectric body (col 3 line 32-39, the body of the testing unit is a dielectric) having interconnected terminal sets (fig 1-36) corresponding to components connectable thereacross (fig 1, electrical device- 24; states that multiple electrical devices can be tested simultaneously (col 1 line 67-col 2 line 3) and configured to provide a common terminating point for said components during normal operation thereof (see figure 2-pins 36 are connected to 30, which have a common terminating point adjacent the edge of PCB 12, col 3 line 26-34). In response to this office action please include a drawing including every aspect of claim one, specifically the centralized connector module having “a dielectric bodying having interconnected terminal sets corresponding to components connectable thereacross and configured to provide a common terminating point for said components during normal operation thereof.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Natalini whose telephone number is 571-272-2266. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on 571-272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeff Natalini



DIANE LEE
SUPERVISORY PATENT EXAMINER